Chapter 4.4.5: Floodplains

4.4.5-1 INTRODUCTION

This chapter describes potential impacts of the Project on floodplains and flood conditions. The chapter describes existing conditions and provides an assessment of the Project with respect to floodplains and the downstream Mount Morris Dam.

4.4.5-2 METHODOLOGY

Effects to floodplains are considered under federal and state regulations. Executive Order 11988 of 1977, "Floodplain Management and Protection," requires that federal agencies provide leadership and take action to reduce the risk of flood loss; to minimize the impact of floods on human safety, health and welfare; and to restore and preserve the natural and beneficial values served by floodplains. Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In addition, 6 NYCRR 502, "Floodplain Management for State Projects," seeks to ensure that the use of New York State lands and the siting, construction, administration, and disposition of state-owned and state-financed facilities are conducted in ways that will minimize flood hazards and losses.

4.4.5-3 EXISTING CONDITIONS

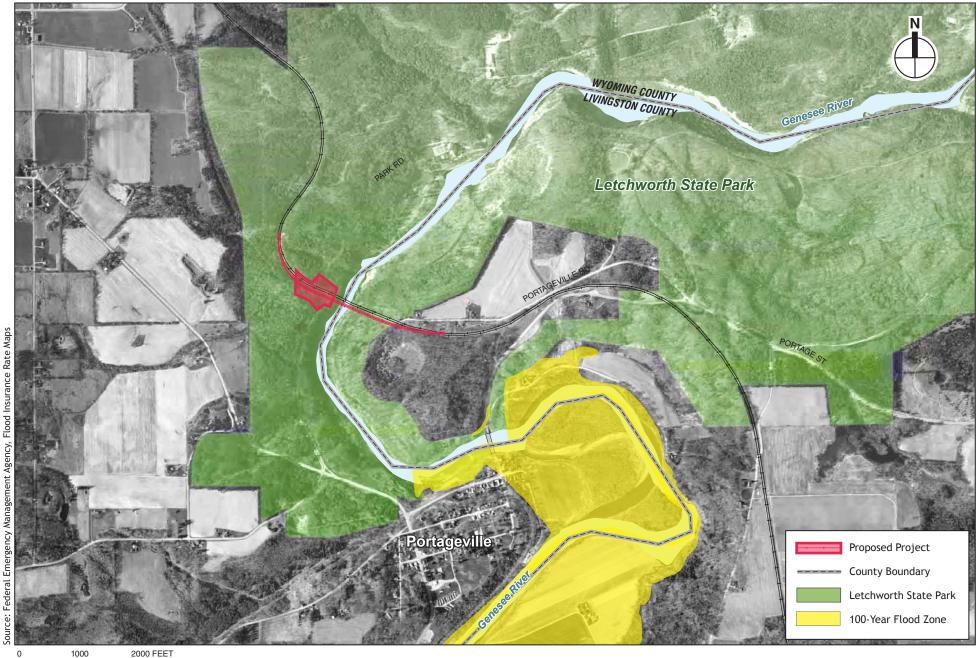
As shown in **Figure 4.4.5-1**, the Project site is located outside of the Federal Emergency Management Agency (FEMA) 100-year floodplain, and this portion of the Genesee River is not a regulated floodway. Due to the steep banks of the Genesee River gorge, there is no floodplain present in the Project area. The closest floodplain is approximately 0.25 miles south of the Project site.

The Mount Morris Dam is a flood control dam located approximately 15 miles downstream from the Portageville Bridge. The principal objective of the dam and its reservoir is to protect downstream communities of the lower Genesee River Watershed. The dam works to control flood waters during heavy rains until the river begins to drop and stored water can be slowly and safely released.

4.4.5-4 EFFECTS ASSESSMENT

4.4.5-4-1 No Action Alternative

The existing bridge is not located within a floodplain or regulated floodway. Maintenance activities for the bridge structure would not affect the waterway or the Genesee River's flood carrying capacity. The downstream Mount Morris Dam would likewise be unaffected by bridge maintenance activities. The No Action Alternative would not impact any floodplains.



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PORTAGEVILLE BRIDGE

FEMA Floodplains near the Project Site Figure 4.4.5-1

4.4.5-4-2 Preferred Alternative

The Preferred Alternative would not encroach upon a designated or proposed floodplain or floodway. The proposed steel deck arch bridge would key into the bedrock of the gorge at an elevation of approximately 80 feet above the normal water level. No in-water piers would be required.

The installation of the temporary work trestle/causeway and removal of the existing bridge piers would likely not affect the Genesee River's flood carrying capacity or the downstream Mount Morris Dam.

4.4.5-5 SUMMARY OF MITIGATION

As the Project would not impact any floodplains or floodway, no measures to mitigate impacts to floodplains would be required.

4.4.5-5-1 Executive Order 11988, Floodplain Management Findings

The Project would not result in significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or which provides a community's only evacuation route, would not result in a significant risk, and would not result in an adverse impact on natural or beneficial floodplain values. As the Project would not impact any floodplains or floodway, the Project will not constitute a floodplain encroachment and is in accordance with E.O. 11988.